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REMARKS/ARGUMENTS

Claims 1, 5, 8, 14, 19, 22, 26, 29, 35, and 40 have been amended. Thirty-four claims remain pending in the application: Claims 1-3, 5-8, 10-15, 19, 20, 22-37, and 40-42. Reconsideration of the pending claims in view of the amendments above and arguments below is respectfully requested.

Turning to the specific objections and rejections:

1. Claims 1-3, 5-8, 10-13, and 22-34 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 6,312,931 (O'Dwyer et al.) in view of U.S. Patent No. 5,981,163 (Horowitz et al.).

Independent claims 1, 5, 8, 22, 26, and 29 have been amended herein to recite "broad spectrum pulsed light." Independent claims 22 and 29 have been further amended to recite "a fluence per flash in the range of about 0.1 to about 0.25 J/cm²." Claim 26 recites "a fluence per flash of light of about 0.05 to about 15 J/cm²." In Applicants response to the office action of May 19, 2004, Applicants amended independent claims 1, 5, and 8 to recite "a fluence per flash in the range of about 0.1 to about 0.25 J/cm²." Thus, pending independent claims 1, 5, 8, 22, 26, and 29 each recite the use of broad spectrum pulsed light (BSPL) as well as fluence ranges between about 0.05 and 15 J/cm².

As Applicants pointed out in the response to the office action of May 19, 2004, O'Dwyer teaches "a fluence greater

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than about 0.001 J/cm² to 50 J/cm²" (col. 4, lines 41-44).
Applicants go on to argue:

The range of 0.1 to about 0.25 J/cm² was determined by the inventors (in the instant application) to be useful for inactivating microbes in a biological composition.. Advantageously, the lower fluence range was one of the reasons that the Broad-Spectrum Pulsed Light (BSPL) treatment worked without the addition of stabilizers or other chemicals as taught by O'Dwyer et al. who adds albumin and Horowitz et al. who adds quenching agents.

The Examiner, in the office action of May 19, 2004 further pointed to column 6, lines 58-59 of Horowitz suggesting that Horowitz teaches a fluence of 0.2 J/cm² as a range for UVC. Applicants further argued:

Importantly, UVC fluence levels do not correspond to the BSPL treatment as taught and claimed in the present application *because UVC is only one component of BSPL.* Therefore a fluence level of 0.2 J/cm² for UVC as taught by Horowitz is outside the range of UVC light utilized in the present application. The present application pertains to a Broad Spectrum of Pulsed Light and not Ultraviolet C light as taught by Horowitz.

In response to Applicants arguments, the Examiner determined that the argument was not persuasive because Broad

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Spectrum Pulsed Light was not explicitly claimed in the independent claims (see the office action of 11/3/2004, page 8, paragraphs 1 and 2). As the aforementioned claims have been amended to specifically state "Broad Spectrum Pulsed Light," Applicants respectfully submit that the combination of O'Dwyer and Horowitz do not teach each and every limitation of the pending claims. Specifically, O'Dwyer and Horowitz do not teach illuminating with broad spectrum pulsed light with a fluence per flash in the range of about 0.1 to about 0.25 J/cm².

Further, there is no motivation to combine the two references. The patent office has the burden of establishing a prima facie case of obviousness. MPEP 2142; *In re Vaeck*, 947 F.2d 488, 20 USPQ2d, 1438 (Fed. Cir. 1991). In establishing a prima facie case of obviousness, there must be some suggestion or motivation in prior art to make the claimed invention. Furthermore, both the suggestion and the expectation of success must be founded in the prior art. The Examiner has not pointed out where the "suggestion or motivation" in the cited references lies to combine the two references.

For at least the reasons state above, O'Dwyer and Horowitz cannot be combined to teach the present invention. Specifically, Horowitz teaches substantially higher fluence levels than O'Dwyer. The reason why Horowitz teaches substantially higher fluence levels is because Horowitz does not use broad spectrum pulsed light. Horowitz must expose a biological composition to a higher intensity light source continuously with a quencher compound to achieve a degree of sterilization. O'Dwyer addresses the inefficiency of the

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Horowitz method by using a broad spectrum light source. Therefore, the methodologies described in O'Dwyer and Horowitz utilize significantly different technologies for the sterilization of a biological composition and, in fact, teach away from each other.

Therefore, the cited references do not teach each and every element of the claimed invention and, further, the Examiner has not established a prima facie case of obviousness. Thus, Applicants respectfully request that the present rejection to each of claims 1-3, 5-8, 10-13, and 22-34 be withdrawn.

2. Claims 14-15, 19-20, 35-37 and 40-42 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 6,312,931 (O'Dwyer et al.) in view of U.S. Patent No. 5,981,163 (Horowitz et al.) and U.S. Patent No. 6,187,572 (Platz et al.).

Independent claims 14, 19, 35, and 40 have been amended herein to recite "broad spectrum pulsed light." Independent claims 35 and 40 have been further amended to recite "a fluence per flash in the range of about 0.1 to about 0.25 J/cm²." In Applicants response to the office action of May 19, 2004, Applicants amended independent claims 14 and 19 to recite "a fluence per flash in the range of about 0.1 to about 0.25 J/cm²." Thus, pending independent claims 14, 19, 35, and 40 each recite the use of broad spectrum pulsed light (BSPL) as well as fluence ranges between about 0.1 and 0.25 J/cm².

Applicants submit that O'Dwyer et al., Horowitz et al., and Platz et al. do not teach each and every element of the claimed invention. Specifically, O'Dwyer, Horowitz, and Platz

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do not teach illuminating with broad spectrum pulsed light with a fluence per flash in the range of about 0.1 to about 0.25 J/cm².

Further, Applicants submit that O'Dwyer, Horowitz, and Platz can not be reasonably combined to teach an invention including limitations directed to broad spectrum pulsed light and a fluence per flash in the range of about 0.1 and 0.25 J/cm². Specifically, for at least the reasons stated above, Horowitz can not be combined with O'Dwyer to produce the claimed invention. Neither O'Dwyer in combination with Platz nor Horowitz in combination with Platz teaches each and every element of the claimed invention.

Therefore, Applicants respectfully request that the present rejection to each of claims 14-15, 19-20, 35-37 and 40-42 be withdrawn.

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CONCLUSION

By way of this amendment, Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone Thomas Lebens at (805)781-2865 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY



Julie A. Hopper
Reg. No. 50,869

Address all correspondence to:
FITCH, EVEN, TABIN & FLANNERY
Suite 1600 - 120 South LaSalle Street
Chicago, IL 60603-3406

Direct telephone inquiries to:
Thomas F. Lebens
805-781-2865